



Zero Waste Around the World

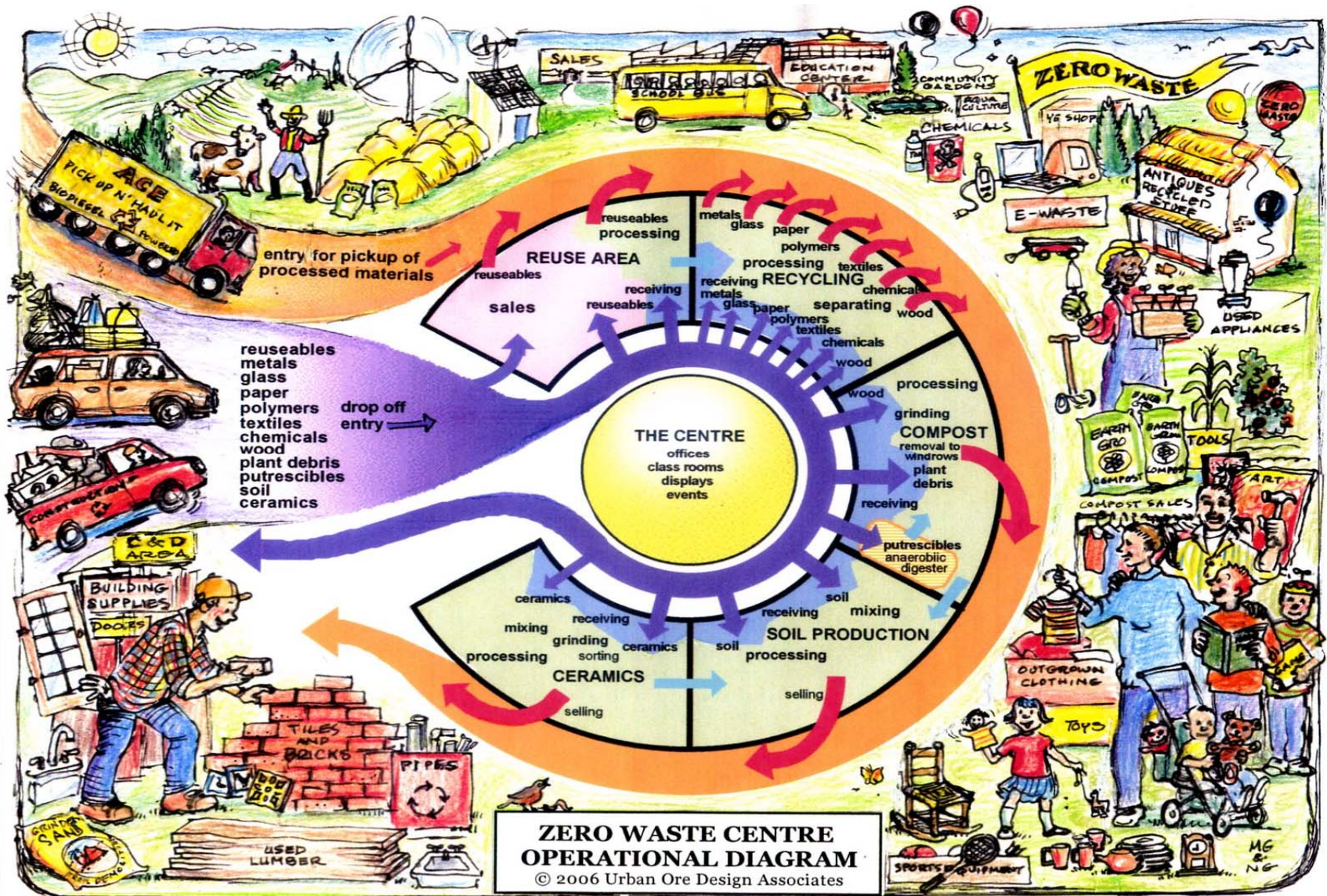
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Richard Anthony Associates
Sustainable Living Symposium
Earth Day Festival at Washington Park
April 2009

World Projects

- Norwich, UK
- Italy
- Carroll County, Maryland
- Los Angeles, CA
- Hawaii Island, Hawaii
- San Luis Obispo, CA
- Santa Maria, CA
- Austin, Texas
- Dubuque, Iowa
- San Diego, CA



United Kingdom



Italy



Carroll County Maryland

Recycled Materials	Value Per Ton
Newspaper	\$299
Cardboard	\$424
Mixed Paper	\$152
Glass Containers	\$56
PET Containers	\$580
HDPE and other Containers and film	\$203
Aluminum Cans	\$1,458
Tin-plated Steel Cans	\$65
Ferrous Scrap	\$65
Composted Materials	
Yard Debris	\$35
Food Scraps	\$65
Untreated Wood	\$20

Categories	%	Annual Tons	\$/Ton	Annual \$s
1. Reuse	3	4,500	550	2,475,000
1. Paper	40	60,000	100	6,000,000
1. Plant Debris	10	15,000	10	150,000
4. Putrescibles	7	10,500	10	100,500
5. Wood	7	10,500	8	84,000
6. Ceramics	2	3,000	4	12,000
7. Soils	1	1,500	10	15,000
8. Metals	5	7,500	40	300,000
9. Glass	6	9,000	10	90,000
10. Polymers	11	16,500	100	1,650,000
11. Textiles	7	10,500	110	1,155,000
12. Chemicals	1	1,500	15	22,500
Total	100	150,000		\$12,054,000

Categories	Tons/Year Generated	Local "Processing"	Regional Manufacturing	Total Jobs
1. Reuse	4,500	50	---	50
2. Paper	60,000	125	80	205
3. Plant Debris	15,000	6	---	6
4. Putrescibles	10,500	12	---	12
5. Wood	10,500	2	---	2
6. Ceramics	3,000	2	NA	2
7. Soils	1,500	1	---	1
8. Metals	7,500	4	23	27
9. Glass	9,000	2	13	15
10. Polymers	16,500	6	70	76
11. Textiles	10,500	43	---	43
12. Chemicals	1,500	2	2	4
Total	150,000	255	188	443



Los Angeles, CA



The PRODUCT

The SWIRP document will be a twenty year master plan which will outline necessary Bureau of Sanitation program changes, infrastructure needs, legislative goals, a financial plan and the environmental impact report. This document will develop from the guidelines and vision shared by stakeholders through Phase I and the resulting information gathered in Phase II. Phase III will implement the visions of Phase I and Phase II through program changes and improving infrastructure

GUIDING PRINCIPLES

- 1. Education to decrease consumption**
- 2. City leadership as a model for zero waste practices**
- 3. Education to increase recycling**
- 4. City leadership to increase recycling**
- 5. Manufacturer responsibility**
- 6. Consumer responsibility**
- 7. Convenience**
- 8. Incentives**
- 9. New, safe, technology**
- 10. Protect public health and the environment**
- 11. Equity**
- 12. Economic efficiency**

Hawaii Island, Hawaii



The following “New Rules” were identified through Stakeholder Meetings

- **Source Separation Ordinance** (separation of designated organics, reusable and recyclables, including all haulers being required to provide recycling services as a condition of their County permit)
- **Get Organics Out of the Landfill** (to reduce global warming, toxic leachate, and stimulate agriculture on the island)
- **Planning, Zoning, Health and Incentives** (facilitation of resource management programs that are economically and environmentally beneficial to the island)
- **Construction & Demolition (C&D) Recycling** (construction and demolition reuse and recycling plans to reduce landfilling and stimulate the local economy)
- **Producer and Retailer Responsibility** (retailer and producer take-back of non-recyclable, non-reusable or non-compostable products and packaging/initiatives to encourage producers to design toxicity and waste out of products and packaging)

San Luis Obispo, CA



Santa Maria, CA



Austin, Texas



AUSTIN, Texas -- Austin seeks to go "zero waste or darn near" it, according to drafters of the proposal adopted by the city. The city has [committed](#) to reducing per capita solid waste sent to landfills and incinerators by 20 percent by 2012 and diverting 90 percent by 2040.

The [resolution](#) unanimously approved by the Austin City Council on Thursday lays out a framework to work toward the goals. Austin's solid waste strategic plan was more than a year in the making. The city is the first in Texas to adopt a "zero-waste" policy. The cities of San Francisco and Seattle also have aggressive policies to reduce solid waste.

Dubuque, Iowa



Going green in Dubuque is about improving our programs and lifestyles to become more efficient and sustainable. Applied to the City's solid waste minimization programs, it means that we must be cost-effective, conserve natural resources, and serve the diverse needs and limitations of all our customers.

Resource Management: Sustainable Dubuque is a community that values the benefits of reducing, reusing and recycling resources.

San Diego, CA

The Stakeholders (CAC) want a policy made in the interest of cooling down the planet and providing cost effective resource management.

1. Phase out all compostable organics out of all active landfills in the County. Comply with Governors GHG reduction program by removing this source of methane from the landfill. This is 50% of material disposed of in the landfill and needed by County farmers.
2. Work for regional social marketing program with universal signage to make recycling and composting available and convenient. (Blue bin, Green bin, Black bin)
3. Have a plan to place 12 category resource recovery drop off centers at all active landfills and transfer stations. (Resource Recovery Parks)
4. Change the rules to discourage wasting.
5. Fund and implement a regional zero waste plan.



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Others

Zero Waste Workshops:

- Canada,
- Japan,
- China,
- Davos,
- Mexico,

International Dialogs:

- Penang Malaysia,
- Baumaris Wales,
- San Francisco, CA,
- Davos, Switzerland,
- Naples, Italy
- Manila, Philippines



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Zero Waste Resources

- **RichardAnthonyAssociates.com**
- **Earth Resource Foundation:**
<http://www.earthresource.org/zerowaste.html>
- **GrassRoots Recycling Network:**
Zero Waste Business Profiles:
<http://www.grrn.org/zerowaste/business/profiles.php>
Zero Waste Business Principles:
<http://www.grrn.org/zerowaste/business/>
- **Zero Waste International Alliance:**
www.zwia.org



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